AMENDMENT TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application.

Listing of Claims

1. (Currently Amended) A cooling system for the cooling of heat producing devices in an aircraft, comprising:

a central cold producing device including at least two cooling machines working independently of each other,

at least one cold consumer, and

a cold conveyance system which connects the cold producing device and the at least one cold consumer, the cold conveyance system including at least two independent cooling circuits ~~completely independent of each other~~, each of the at least two independent cooling circuits coupled to the cold producing device so as to supply ~~supplying~~ a cold carrier medium that has been cooled by the cold producing device to the at least one cold consumer and return ~~returning~~ the cold carrier medium from the at least one cold consumer to the cold producing device,

whereby the at least two cooling machines are coupled in parallel to the cold conveyance system such that each of the at least two independent cooling circuits are thermally coupled to the at least two cooling machines.

2. (Canceled).

3. (Previously Presented) The cooling system in accordance with claim 1,

wherein the number of cooling machines of the cold producing device is configured to cover a cold requirement for the aircraft during ground operation.

4. (Previously Presented) The cooling system in accordance with claim 1,

wherein the at least two cooling machines use air outside of the pressure cabin of the aircraft as a heat sink in order to expel heat, and the warm extracted air is expelled outside of the pressure cabin.

5. (Currently Amended) The cooling system in accordance with claim 1,

wherein one of the at least two independent cooling circuits is provided in each of a front half of the aircraft and a rear half of the aircraft.

6. (Currently Amended) The cooling system in accordance with claim 1,

wherein one of the at least two independent cooling circuits is provided on each side of the aircraft in relation to a longitudinal axis of the aircraft.

7. (Currently Amended) The cooling system in accordance with claim 6,

wherein cold consumers positioned in the center of the aircraft are supplied with the cold carrier medium from the at least two independent cooling circuits.

8. (Currently Amended) The cooling system in accordance with claim 1,

wherein each independent cooling circuit includes at least one cold carrier pump for the circulation of the cold carrier medium.

9. (Currently Amended) The cooling system in accordance with claim 8,

wherein at least two cold carrier pumps are assigned to each independent cooling circuit and are supplied with electric energy independently of one another.

10. (Currently Amended) The cooling system in accordance with claim 1,

wherein at least one storage unit for intermediary storage of the cold carrier medium is assigned to each independent cooling circuit.

11. (Currently Amended) The cooling system in accordance with claim 1,

wherein each of the at least two independent cooling circuits are thermally coupled to the [[a]] cold consumer by a heat exchanger.

12. (Previously Presented) The cooling system in accordance with claim 1,

wherein the at least one cold consumer has a secondary cold conveyance system in which cold is transferred from the cold carrier medium by a secondary cold carrier.

13. (Currently Amended) The cooling system in accordance with claim 1, further comprising:

a central control unit configured to control the cold output of each of the at least two independent cooling circuits dependent upon at least one of the specified parameters for a current cold requirement.

14. (Currently Amended) The cooling system in accordance with claim 13,

wherein the specified parameters reflect the temperature of the cold carrier medium measured in at least one point in the independent cooling circuits and/or information about the current cold requirement and/or a pressure of the cold carrier medium in the cooling.

15. (Previously Presented) The cooling system in accordance with claim 1,

wherein the cold output is controlled so as to adapt to a current cold requirement in the aircraft by turning individual cooling machines of the cold producing device on and off.

16. (Previously Presented) The cooling system in accordance with claim 1,

wherein a check valve and a bypass line which bypasses the cooling machine are assigned to each cooling machine.

17. (Previously Presented) The cooling system in accordance with claim 13,

wherein the cold output of the at least two cooling machines is continuously controllable by the central control unit.

18. (Previously Presented) The cooling system in accordance with claim 13,

wherein the central control unit records an output temperature of the cold carrier medium leaving the at least two cooling machines and controls the at least two cooling machines in accordance with the output temperature measured and recorded.

19. (Previously Presented) The cooling system in accordance with claim 18,

wherein the cold output of the at least two cooling machines can be changed by a bypass valve and/or by varying a speed of a compressor used in the at least two cooling machines.

20. (Currently Amended) The cooling system in accordance with claim 13,

wherein the central control unit changes a quantity of the cold carrier medium supplied in each of the independent cooling circuits.

21. (Currently Amended) The cooling system in accordance with claim 20,

wherein the central control unit changes a speed of at least one cold carrier pump in the at least two independent cooling circuits.

22. (Currently Amended) The cooling system in accordance with claim 1,

wherein each independent cooling circuit is supplied with electric energy, independently of at least one other independent cooling circuit.

23. (Currently Amended) An aircraft with the [[a]] cooling system in accordance with claim 1.